1 2 3 4 5 6 7 8 9	Brandon H. Stroy (SBN 289090) bstroy@maynardnexsen.com MAYNARD NEXSEN LLP Two Embarcadero Center, Suite 1450 San Francisco, CA 94111 Telephone: 415.646.4703 Facsimile: 205.714.6415  Ashe Puri (SBN 297814) apuri@maynardnexsen.com Jacqueline Relatores (SBN 341583) jrelatores@maynardnexsen.com MAYNARD NEXSEN LLP 10100 Santa Monica Boulevard, Suite 550 Los Angeles, CA 90067 Telephone: 310.596.4344 Facsimile: 205.714.6415	
12	Attorneys for Plaintiff SARA, Inc.	
13	UNITED STATI	ES DISTRICT COURT
14	NORTHERN DISTRICT OF CALIFORNIA	
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16	SCIENTIFIC APPLICATIONS & RESEARCH ASSOCIATES (SARA), INC.	Case No. 3:22-CV-04480-JSC
17		SUPPLEMENTAL COMPLAINT FOR:
18	Plaintiff,	(1) INFRINGEMENT OF U.S. PATENT
19	V.	NO. 7,606,115
20	ZIPLINE INTERNATIONAL, INC.	(2) MISAPPROPRIATION OF TRADE SECRETS UNDER THE DEFEND
21	Defendant.	TRADE SECRETS ACT (18 U.S.C. §
	Defendant.	1836) (3) MISAPPROPRIATION OF TRADE
22		SECRETS UNDER THE CALIFORNIA
23		UNIFORM TRADE SECRETS ACT (CAL. CIV. CODE § 3426)
24		(4) BREACH OF CONTRACT
25		(5) UNFAIR COMPETITION UNDER CAL. CIV. CODE § 17200
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# Plaintiff Scientific Applications & Research Associates (SARA), Inc. hereby states and alleges as follows:

#### **SUMMARY OF THE DISPUTE**

- 1. Unmanned aerial vehicles ("UAV's" or "drones") are now regularly piloted by private individuals, corporations, utilities, and government entities. With the increased prevalence of UAV's in our skies, the risk of midair collisions is also increasing dramatically. UAV's risk colliding with many different types of airborne objects, including other UAV's, birds, helicopters, and airplanes. In order to help address this increasing risk, the Federal Aviation Administration (FAA) has developed, and continues to develop, a series of regulations governing use of airspace by UAV's, and ensuring that midair collisions with manned aircraft are avoided.
- 2. There are multiple technologies that have been employed by UAV manufacturers to assist with remote and/or autonomous piloting of UAV's and avoid midair collisions. These technologies are commonly referred to as "detect and avoid", or "DAA" systems. Historically, DAA systems have included optical cameras, radar (radio detection and ranging), lidar (light detection and ranging), and others, and many of these technologies have long been used in large, commercial, private, and military aircraft.
- 3. UAV's have made it possible to dramatically shrink the size of aircrafts used for short range flights. This, in turn, allows for reduced energy consumption and cost, making aerial surveillance, reconnaissance, photography, and package delivery increasingly economical and efficient.
- 4. At the same time, the small size and weight characteristics of many UAV's have made many traditional DAA systems impractical due to issues regarding weight, aerodynamics, or other interference.
- 5. Since its founding in 1989, SARA has worked to develop forward-looking solutions to some of the most technologically complex challenges we face today. Among these solutions has been the development of a revolutionary Acoustic DAA system that is accurate, lightweight, aerodynamically efficient, and safe.

- 6. SARA's Acoustic DAA technology is the result of years of research and experimentation, collection, and analysis of terabytes of data, and the expertise of some of the most accomplished acoustic and aerospace engineers on the planet.
- 7. SARA has diligently sought to protect its technological contributions by obtaining a portfolio of patents covering its most important innovations. Among these patents is U.S. Patent No. 7,606,115 ("the '115 patent"), which is entitled, "Acoustic Airspace Collision Detection System".
- 8. Additionally, SARA's Acoustic DAA technology is enabled by significant developments in proprietary hardware and software developed by SARA, and through the accumulated knowledge, expertise, and know-how of SARA engineers and employees. In addition to its patent portfolio, SARA preserves much of this intellectual property as trade secrets.
- 9. Zipline International, Inc. ("Zipline") was founded in 2014 to develop UAV's designed for delivery of small payloads. Initially, Zipline UAV's delivered medical supplies to remote regions in Africa. More recently, Zipline has begun to expand the scope of its operations both geographically and in terms of the types of deliveries it offers.
- 10. Zipline describes its mission on its social media page as follows: "At Zipline, we're transforming the way goods move. Delivering products precisely where and when they are needed, safely and reliably, every day, across multiple countries."
  - 11. Additionally, Zipline provides the following description of its services:

Zipline was founded to create the first logistics system that serves all humans equally. Our aim is to solve the world's most urgent and complex access challenges. Leveraging expertise in robotics and autonomy, Zipline designs, manufactures, and operates the world's largest automated delivery system. Zipline serves tens of millions of people around the world and is making good on the promise of building an equitable and more resilient global supply chain.

From powering Rwanda's national blood delivery network and Ghana's COVID-19 vaccine distribution, to providing on-demand

home delivery for Walmart and enabling leading healthcare providers to bring care into the home in the United States, Zipline is transforming the way goods move. By transitioning to clean, electric, instant logistics, we can decarbonize delivery, decrease road congestion, and reduce fossil fuel consumption and air pollution, while providing equitable access for billions of people. The technology is complex but the idea is simple: a teleportation service that delivers what you need, when you need it. Zipline is inspiring people, governments, and businesses to imagine what is possible when goods can move as seamlessly as information.

12. Currently, Zipline's delivery UAV's are small, fixed wing aircraft, weighing approximately 45 lbs, and having a wingspan of approximately 11 feet:



13. In 2017, Zipline entered into discussions with SARA related to incorporating SARA's acoustic DAA technology into Zipline's delivery UAV's. As part of these discussions, the parties entered into a Confidential Non-Disclosure Agreement. That Agreement included a description of the proprietary information to be shared by the parties indicating that SARA would

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be sharing information related to its acoustic sense and avoid technology for UAV's.

- 14. During 2017 and early 2018, the companies' ongoing discussions led to negotiation of a term sheet describing the proposed details of their partnership. As part of these discussions, Zipline was made aware of SARA's '115 patent and its Acoustic DAA technology. Zipline also obtained confidential, proprietary, and trade secret information about SARA's products and technology, subject to the Confidential Non-Disclosure Agreement between the parties.
- 15. In 2018, Zipline ceased communications with SARA relating to this potential partnership.
- 16. In May 2019, Zipline raised \$190 million from investors supporting its UAV delivery business.
- 17. In September 2020, Zipline entered into an agreement with Walmart, Inc. to launch a UAV delivery service of health and wellness products in the United States. At the time the partnership was announced, the companies also announced their intention to expand the partnership into offering UAV delivery of general merchandise sold by Walmart. Since that time, Zipline and Walmart have been operating Zipline UAV's for deliveries of products and merchandise sold by Walmart.
- 18. In June 2021, Zipline raised an additional \$250 million at a \$2.75 billion valuation from investors to support its UAV delivery business.
- 19. On June 7, 2022, Zipline issued a press release announcing the unveiling of "its new Detection and Avoidance (DAA) system." The press release describes Zipline's system as follows:

A first for the industry, the new system uses onboard acoustic-based technology to enable safe and autonomous flights in complex, and even uncontrolled airspaces. This technology marks a significant step forward in realizing commercial autonomous deliveries at scale. Zipline's new DAA system relies on a series of small, lightweight acoustic microphones and onboard processors to navigate airspace and provide 360-degree awareness with a range up to 2,000 meters. Using this onboard system, aircraft can autonomously monitor for

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other aircraft in real-time, and adapt to changes in their flight path.

- 20. In the June 7, 2022 press release, Zipline's co-founder and CTO, Keenan Wyrobek described Acoustic DAA technology as "the holy grail for drone technology".
- 21. Zipline now describes itself as "the global leader in instant logistics" making, on average, "a delivery every four minutes".
- 22. Since at least April 2020, Zipline has been manufacturing, using, selling, offering to sell, and/or licensing UAV's featuring Acoustic DAA systems which infringe one or more claims of SARA's '115 patent.
- 23. Additionally, successful implementation of SARA's Acoustic DAA technology into Zipline's UAV's requires the unauthorized use of SARA's proprietary technology, trade secrets, and know-how. On information and belief, Zipline has thus misappropriated and is using SARA's trade secrets in violation of California and federal trade secret laws, and in breach of the Confidential Non-Disclosure Agreement executed by the parties.

## THE PARTIES

- 24. Plaintiff Scientific Applications & Research Associates (SARA), Inc. is a California corporation having its principal place of business at 6300 Gateway Drive, Cypress, California 90630.
- 25. On information and belief, Defendant Zipline International, Inc. is a Delaware corporation having its principal place of business at 33 Corey Way, South San Francisco, California 94080.

#### JURISDICTION AND VENUE

- 26. This is an action for patent infringement arising under the patent laws of the United States, for misappropriation of trade secrets under the Defend Trade Secrets Act and under the California Uniform Trade Secrets Act, for breach of contract, and for unfair competition.
- 27. Accordingly, this Court has exclusive subject matter jurisdiction pursuant to the provisions of 28 U.S.C. §§ 1331 and 1338(a). This Court also has supplemental jurisdiction over the state law claims under 28 U.S.C. § 1367(a) because they are so closely related to the federal

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claims that they form a single case or controversy

- 28. This Court has personal jurisdiction over Defendant Zipline because Zipline has engaged in systematic and continuous business activities in this District and has a principal place of business in this district located at 33 Corey Way, South San Francisco, California 94080.
- 29. Venue is proper in this district pursuant to 28 U.S.C. § 1391(b)(1) because the Defendant is a resident of the Northern District of California, and under 28 U.S.C. § 1391(b)(2) because a substantial portion of the events or omissions giving rise to the claims asserted in this Complaint occurred within the Northern District of California. Venue is also proper under 28 U.S.C. § 1400(b). Defendant has a regular and established places of business in this District and has committed acts of infringement in this District.

#### SARA'S ACOUSTIC DAA PATENT

30. U.S. Patent No. 7,606,115, entitled "Acoustic Airspace Collision Detection System", was duly and lawfully issued by the United States Patent and Trademark Office on October 20, 2009. It was filed on October 17, 2007. On January 23, 2024, the United States Patent and Trademark Office issued a Certificate of Correction to the '115 patent, in which a claim of priority to Provisional Application No. 60/852,320, filed October 17, 2006, was added. The '115 patent has been properly assigned by the original inventors to SARA, and the assignment has been recorded with the USPTO (Reel 020069; Frame 0158). A true and correct copy of the '115 patent is attached to this Complaint as Exhibit A. A true and correct copy of the January 23, 2024 Certificate of Correction to the '115 patent is attached to this Complaint as **Exhibit N**.

# **BACKGROUND**

# SARA's Development of Its Acoustic DAA Technology

- SARA is a pioneer in the development of collision avoidance technologies for 31. UAV's.
- 32. SARA began development of its acoustic detection technology in 1999 for use in military applications to allow a small UAV to distinguish military vehicles from civilian vehicles by their acoustic signals. The original SARA acoustic microphone array was designed to be

implemented into the US Army Scout Unmanned Aerial System (UAS).

- 33. In 2005, SARA began working to migrate its acoustic detection technology into the first ever Acoustic DAA platform for UAS.
- 34. From 2005 through 2007, SARA worked to adapt its acoustic expertise to detect low-flying manned aircraft, and experimentally demonstrated that the technology would be suitable for Acoustic DAA in UAV/UAS applications.
- 35. The resulting technology solution allowed UAV's to "hear", "locate", and "track" other nearby, low flying aircraft, determine whether a collision is imminent, and take necessary evasive action.
- 36. On October 17, 2006, SARA filed a provisional patent application with the United States Patent and Trademark Office covering its Acoustic DAA technology. On October 16, 2007, SARA filed a non-provisional patent application with the United States Patent and Trademark Office covering its Acoustic DAA technology. The application ultimately issued on October 20, 2009 as U.S. Patent No. 7,606,115, which is now asserted in this action. On January 23, 2024, the United States Patent and Trademark Office issued a Certificate of Correction to the '115 patent, in which a claim of priority to Provisional Application No. 60/852,320, filed October 17, 2006, was added.
- 37. SARA has continued development of its Acoustic DAA technology following the filing and issuance of the '115 patent.
- 38. For example, in 2011, SARA integrated its Acoustic DAA technology into a RQ-11 Raven UAV, and carried out successful tests of the combined airframe and DAA system:



39. Between 2013 and 2017, SARA's development of its Acoustic DAA technology continued further, with the design and implementation of upgraded acoustic probes, advanced detection algorithms, customized processors, and dedicated DAA flight software. SARA also integrated its Acoustic DAA technology into other UAV aircraft for testing, including the RQ-20 Puma:





40. In the 2017-2019 timeframe, SARA's Acoustic DAA was extensively vetted by the FAA, United States Air Force and the United States Coast Guard using fixed wing, RQ-20 Puma UAV's. In 2018, SARA entered into an agreement with UAV maker Precision Hawk to provide its Acoustic DAA technology for use with Precision Hawk's Beyond Visual Line of Sight (BVLOS) UAV platform. Precision Hawk announced the partnership and the use of SARA's Acoustic aircraft detection system in a press release dated May 1, 2018 (https://www.precisionhawk.com/blog/media/topic/multi-rotor-drone-bylos-flight).

41. SARA has also engaged with other potential partners seeking to use its proprietary technology, including package delivery companies.

### SARA's Partnership Discussions with Zipline

42. In April, 2017, discussions between SARA and Zipline regarding the use of SARA's proprietary DAA technology began when the parties entered into a Confidential Non-Disclosure Agreement. Zipline executed the Confidential Non-Disclosure Agreement on April 3, 2017. SARA executed it two days later, on April 5, 2017. A redacted copy of the Confidential Non-Disclosure Agreement between SARA and Zipline is attached hereto as **Exhibit B**.

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- 43. As part of the April 11, 2017 teleconference, SARA sent Zipline a more detailed presentation outlining its proprietary Acoustic DAA technology, and containing additional details regarding the functionality and implementation of the technology. Included in the April 4 and April 11, 2017 presentations were various results of SARA work product and know how that SARA considered, and still considers to be confidential trade secrets, including: (1) information regarding the implementation and use of acoustic microphone probes on a fixed wing airframe; (2) information regarding the placement of acoustic microphone probes on a fixed wing airframe; (3) technical information regarding acoustic microphone probes, including the use of "break-away" probes; (4) technical information regarding noise reduction technology used in acoustic microphone probes, including wind screening and other flow noise reduction technology; (5) technology and know-how related to propeller noise cancellation; (6) information and work product related to aircraft signature identification and aeroacoustic beamforming; (7) results and data derived from SARA's proprietary acoustic collision avoidance simulator; (8) acoustic DAA software and hardware schematics and specifications; and (9) other general know-how related to integration and use of acoustic sensors on UAV's.
- 44. On May 5, 2017, SARA and Zipline participated in an in-person meeting at Zipline's headquarters in South San Francisco, California. During this meeting, SARA shared additional details of its Acoustic DAA technology with Zipline, including another presentation that expanded upon the trade secret information that had been shared previously.
- 45. Beginning on May 22, 2017, the parties exchanged drafts of a term sheet outlining the details of the proposed partnership between SARA and Zipline. The initial term sheet, drafted by Zipline, stated that "SARA is a company with expertise in acoustics-based Sense & Avoid systems. SARA has developed a prototype Acoustic Sense and Avoid Module (ASAM) that can be mounted on a UAV and can be used to detect aircraft within its vicinity." Subsequent drafts of the proposed term sheet were exchanged between the parties in June 2, 2017 and June 9, 2017. These drafts maintained the characterization of SARA as having developed the Acoustic Sense and Avoid Module, and also contained additional provisions identifying and protecting SARA's intellectual property.

- 46. On June 15, 2017, Zipline employee Lawrence Williams sent an email to SARA employee Jay Cleckler requesting "a high-level summary" of SARA's intellectual property assets.
- 47. Later the same day, Jay Cleckler responded with an email identifying SARA patents and trade secrets related to its acoustic DAA technology. The June 15, 2017 email correspondence between Williams and Cleckler is attached hereto as **Exhibit C**.
- 48. Cleckler's email identified U.S. Patent No. 7,606,115 and U.S. Patent Publication No. 20050169489 (which issued as U.S. Patent No. 7,916,887). It also identified numerous SARA trade secrets related to acoustic DAA technology:
  - Prop noise cancellation;
  - Aeroacoustic beamforming;
  - Aeroacoustic adaptive beam detection;
  - Bayesian collision declaration;
  - Adaptive tracking;
  - Vibration reduction microphones;
  - Acoustic collision avoidance simulator;
  - Safety case and waiver argument for small UAS that fly below 1000ft AGL;
  - Acoustic software and hardware design for an acoustic detection system;
  - General know-how in integrating acoustic sensors on air frames;
- 49. Negotiations between SARA and Zipline continued for the remainder of 2017 and into 2018, including plans for Zipline to make a site visit to a SARA testing facility to see SARA's Acoustic DAA technology in operation firsthand.

#### Zipline's Misappropriation of SARA's Trade Secrets

- 50. In the Spring of 2018, Zipline abruptly ceased communications with SARA regarding the parties' potential partnership and did not re-engage despite periodic attempts by SARA to restart discussions. The envisioned site visit never occurred, and Zipline did not participate in any further discussions with SARA regarding partnership or use of SARA's proprietary technology.
  - 51. SARA has never provided written permission or authorization to Zipline to use the

SARA confidential, proprietary, and trade secret information that SARA provided to Zipline under the Confidential Non-Disclosure Agreement.

- 52. Nonetheless, on information and belief, since at least April 2020, Zipline has continuously and systematically used SARA's confidential, proprietary, and trade secret information regarding Acoustic DAA technology in development and testing of Zipline's own products, for purposes of generating investment fundraising, and for purposes of entering into lucrative contracts with third parties including Walmart, Inc.
- 53. This use has been unlawful. It has violated the trade secret laws of the United States and the State of California, and has breached the express terms of the Confidential Non-Disclosure Agreement between the parties. Zipline's products also infringe SARA's '115 patent for the reasons explained below.
- 54. On information and belief, this unlawful activity is characteristic of the culture of Zipline as set forth by its CEO, Keller Rinauldo. For example, in a November 19, 2021 interview, Rinauldo stated that a "fundamental truth" he had learned was that "if you ask for permission, the answer is always no. So better to just like kind of go for it and hope for forgiveness. I've been given forgiveness more often than I've been given permission." (https://www.youtube.com/watch?v=oLSG7\_tRYxM).
- 55. On information and belief, Zipline's use of SARA's confidential, proprietary, and trade secret information regarding Acoustic DAA technology, and its manufacture, use, and/or sale of products that infringe SARA's '115 patent, enabled Zipline to achieve significant development and business milestones between 2018 and the present.
- 56. In May 2019, Zipline raised \$190 million in new investor funding at a valuation of over \$1 billion. On information and belief, Zipline promoted its use of Acoustic DAA technology to prospective investors in order to generate interest and secure this funding.
- 57. In early 2020, SARA became aware that Zipline had been manufacturing and testing UAV's including acoustic DAA technology. On April 20, 2020, counsel for SARA sent a letter to Conor French, Zipline's General Counsel, reminding Zipline of its obligations under the 2017 Confidential Non-Disclosure Agreement between the parties, and explicitly reminding Zipline of

the existence of the '115 patent and its relevance to acoustic anti-collision technology. A copy of the April 20, 2020 letter is attached hereto as **Exhibit D**.

- 58. Neither SARA nor its counsel received any response to the April 20, 2020 letter.
- 59. On May 8, 2020, Zipline submitted two petitions to the Federal Aviation Administration for exemption from various regulations relating to commercial package delivery using unmanned aircraft.
- 60. On information and belief, Zipline's May 8, 2020 petitions to the FAA relied upon Zipline's use of SARA's confidential, proprietary, and trade secret information regarding acoustic DAA technology.
- 61. On information and belief, between May 8, 2020 and May 2021, Zipline continued development and testing of UAV's incorporating SARA's confidential, proprietary, and trade secret acoustic DAA technology at Zipline facilities in South San Francisco, CA, Half Moon Bay, CA, and Esparto, CA.
- 62. In May 2021, Zipline posted the following photograph to its LinkedIn social media account:



- 63. As indicated by the red arrows above, the photograph shows the Zipline UAV with acoustic DAA microphones affixed to its wings.
- 64. In response to Zipline's posting of this photo on LinkedIn, Gur Kimchi, a prominent name in the UAV industry and former VP of Amazon Prime Air commented, "Hey Zipline that

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sure looks like a microphone array for airborne detect and avoid:)" Kimchi also tagged SARA CEO Parviz Parhami on his comment. On information and belief, Zipline deleted the post, including the photograph and Kimchi's comment, from its LinkedIn page by the next morning.

- Following Zipline's LinkedIn post, counsel for SARA sent another letter to Conor 65. French, Zipline's general counsel, alerting him to the infringement and reminding him of Zipline's obligations under the Confidential Non-Disclosure Agreement between the companies. A copy of the May 17, 2021 letter is attached hereto as Exhibit E.
  - 66. Neither SARA nor its counsel received any response to the May 17, 2021 letter.
- 67. On information and belief, between May 17, 2021 and the present, Zipline continued development and testing of UAV's incorporating SARA's confidential, proprietary, and trade secret acoustic DAA technology at Zipline facilities in South San Francisco, CA, Half Moon Bay, CA, and Esparto, CA, during which time Zipline has achieved significant business milestones.
- 68. On June 29, 2021, Zipline announced that it had raised \$250 million in new investor funding at a valuation of \$2.75 billion. On information and belief, Zipline promoted its use of acoustic DAA technology to prospective investors in order to generate interest and secure this funding. (https://flyzipline.com/press/zipline-announces-new-funding/).
- 69. On November 17, 2021, Zipline issued a press release announcing a partnership with Walmart, Inc. to use Zipline UAV's for "on-demand deliveries of select health and wellness and consumable items from the Walmart Neighborhood Market in Pea Ridge, Ark." (https://flyzipline.com/press/walmart-launches-with-zipline-in-arkansas/).
- 70. On June 7, 2022, Zipline issued a press release announcing the unveiling of the "first onboard, acoustic detection & avoidance system for autonomous drones." (https://flyzipline.com/press/zipline-unveils-first-onboard-acoustic-detection-and-avoidancesystem-for/).
- 71. In its June 7, 2022 press release, Zipline representatives describe acoustic DAA technology as "the holy grail for drone technology." Zipline further admits that "The hardware has already been built into Zipline's drones and is ready to be activated for use in many regions upon regulatory approval.".

72. On June 20, 2022, Zipline issued a press release announcing the receipt of FAA Part 135 Air Carrier Certification to operate on-demand delivery UAV's within the United States. On information and belief, Zipline was able to obtain FAA Part 135 Air Carrier Certification only because of its use of SARA's confidential, proprietary, and trade secret information regarding acoustic DAA technology.

#### **Zipline's Publication of SARA's Trade Secrets**

- 73. Beginning on December 31, 2019, Zipline began filing patent applications with the United States Patent and Trademark Office related to Acoustic DAA technology. These applications disclosed the same proprietary, trade secret technology that had been confidentially disclosed pursuant to an NDA by SARA in connection with the April 11, 2017 teleconference and the May 5, 2017 meeting between the companies.
- 74. From December 31, 2019 through December 30, 2020, Zipline filed numerous provisional patent applications related to Acoustic DAA technology:
  - Dec. 31, 2019 : Provisional App. No. 62/955,946
  - Mar. 2, 2020 : Provisional App. No. 62/984,266
  - May 7, 2020 : Provisional App. No. 63/021,633
  - Sep. 24, 2020 : Provisional App. No. 63/082,869
  - Sep. 24, 2020 : Provisional App. No. 63/082,832
  - Sep. 24, 2020 : Provisional App. No. 63/082,821
  - Sep. 24, 2020 : Provisional App. No. 63/082,838
- 75. On December 30, 2020, Zipline filed three (3) non-provisional patent applications related to Acoustic DAA technology:
  - U.S. Patent App. No. 17/138,063 ("Acoustic Based Detection and Avoidance for Aircraft")
  - U.S. Patent App. No. 17/138,285 ("Correlated Motion and Detection for Aircraft")
  - U.S. Patent App. No. 17/138,526 ("Acoustic Probe Array for Aircraft")
- 76. Zipline filed a fourth non-provisional patent application related to Acoustic DAA technology on September 24, 2021:

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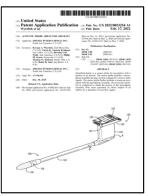
- U.S. Patent App. No. 17/485,050 ("Structures to Limit Collision Damage for Aircraft")
- 77. These four non-provisional patent applications have now been published by the USPTO and remain pending.
- 78. U.S. Patent Pub. No. 2021/0225182 A1 published on July 22, 2021. An image of the cover page of the publication is shown below, and copy of the publication is attached hereto as **Exhibit F**.
- 79. U.S. Patent Pub. No. 2022/0011786 A1 published on Jan. 13, 2022. An image of the cover page of the publication is shown below, and copy of the publication is attached hereto as **Exhibit G**.
- 80. U.S. Patent Pub. No. 2022/0053254 A1 published on Feb. 17, 2022. An image of the cover page of the publication is shown below, and copy of the publication is attached hereto as **Exhibit H**.
- 81. U.S. Patent Pub. No. 2022/0089293 A1 published on Mar. 24, 2022. An image of the cover page of the publication is shown below, and copy of the publication is attached hereto as **Exhibit I**.



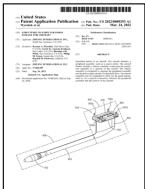
U.S. Patent. Pub. No. 2021/0225182 A1



U.S. Patent. Pub. No. 2022/0011786 A1



U.S. Patent. Pub. No. 2022/0053254 A1



U.S. Patent. Pub. No. 2022/0089293 A1

- 82. Zipline's published patent applications contain SARA confidential, proprietary, and trade secret information originally disclosed by SARA to Zipline pursuant to the April 5, 2017 Confidential Non-Disclosure Agreement between the parties.
- 83. For example, SARA trade secret information that has now been published in Zipline's patent applications includes:

- Descriptions and work flows related to aeroacoustic signal processing in an acoustic DAA system;
- Descriptions and workflows related to aeroacoustic beamforming;
- Collision avoidance algorithms and work flows for use in an acoustic DAA system;
- External microphone design and airframe mounting information; and
- Hardware and software configurations used in an Acoustic DAA system.
- 84. On information and belief, Zipline continues to prosecute these applications and thus intends to claim ownership of SARA's proprietary Acoustic DAA technology for itself.
- 85. Zipline filed its patent applications and caused the same to be published without written authorization from SARA, and thus in violation of the Confidential Non-Disclosure Agreement between the parties.

#### Zipline's Infringement of U.S. Patent No. 7,606,115

- 86. The '115 Patent contains one independent claim (Claim 1) and 10 dependent claims (Claims 2-11).
- 87. The '115 Patent is directed to an acoustic airspace collision detection system for piloted and unmanned aircraft that utilizes the sound generated by an approaching target to detect the direction of the target, assess the risk of collision, and automatically execute an evasive maneuver command.
  - 88. Claim 1 recites:
    - "1. An acoustic collision detection system for avoiding a potential collision between an aircraft and an approaching target comprising: an array of acoustic probes;

a digital signal processor configured to receive acoustic data from the array of acoustic probes, wherein said digital signal processor filters out noise and its own acoustic signals; extracts the acoustic signals emanating from the approaching target; calculates the intensity, the bearing and the bearing angle rate of change of the approaching target, and determines whether the aircraft and the approaching target are on the potential collision course."

As shown in the following claim chart, Zipline's Acoustic DAA technology

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infringes at least Claim 1 of the '115 Patent<sup>1</sup>:

1. An acoustic collision detection

collision between an aircraft and an

system for avoiding a potential

approaching target comprising:

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Acoustic DAA collision system

Zipline's DAA collision system is designed to avoid a potential collision between an aircraft and an approaching target:

- https://www.flyzipline.com/press/zipline-unveils-first-onboard-acoustic-detection-and-avoidance-system-for ("Zipline Unveils First Onboard,
  Acoustic Detection & Avoidance System for
  Autonomous Drones") (Exhibit J)
- https://dronedj.com/2022/06/08/zipline-unveilsonboard-acoustic-detect-and-avoid-drone-solution ("San Francisco-based Zipline announced the

<sup>&</sup>lt;sup>1</sup> Upon information and belief, Zipline's Acoustic DAA technology also infringes a number of dependent claims of the '115 Patent. For purposes of this Complaint, Plaintiff is providing the following infringement chart with respect to one of the claims of the '115 Patent. Plaintiff reserves all rights to assert any and all claims of the '115 Patent that are infringed by Zipline.

creation of its audio-monitoring DAA system, which it calls unprecedented in the drone sector. The company says the innovation will allow automated UAVs to ensure collision-free flights over long distances and safe operation even in uncontrolled airspaces.") (Exhibit K)

• https://medium.com/@zipline/using-sound-to-unlock-instant-logistics-at-scale-7696c27e736e
("At Zipline, when we are going to explore a crazy solution we start by figuring out the hardest technical challenges that are most likely to kill the solution and we focus on solving just those challenges, or learning why, at a physics level, they are not solvable. We identified three such technical challenges to this solution:

Over the sound of our propellers, which are so close to our microphones, could we hear the sound of far away, relatively faint aircraft?

Could we hear far away aircraft over the aero acoustic noise caused by air flowing over our aircraft? Aero acoustic noise is the sound that gets really loud if you stick your head out of a car window but gets quiet when you bring your head back inside (don't try this at home :)).

Could we make microphones that would not get drowned out when getting pelted by moisture droplets ranging from dense but tiny droplets that make up clouds to large raindrops?

After a year of building prototypes, running tests and doing lots of analysis, we solved all three of these hard problems and sensing aircraft with microphones went from a crazy idea to a brilliant solution.") (Exhibit L)

- U.S. Pat. Appl. Pub. No. 2021/0225182, Assignee Zipline International Inc., Inventors Wyrobek et al., at Title: "Acoustic Based Detection and Avoidance for Aircraft"; [0020] ("the detection and avoidance (DAA) system uses an array of audio sensors to sense location of intruder in multiple directions relative to an aircraft, e.g., 360 degrees") (Exhibit F)<sup>2</sup>
- U.S. Pat. Appl. Publ. No. 2022/0011786, Assignee Zipline International Inc., Inventors Teisberg et al., at Abstract ("An avoidance maneuver is commanded for the aircraft based on a track of the intruding aircraft generated based on the multichannel audio signal and a second signal providing additional information about the intruding aircraft." (Exhibit G).

<sup>2</sup> Upon information and belief, Zipline may be claiming that the technologies covered in its patent applications are incorporated into the accused DAA products. *See https://dronedj.com/2021/09/06/zipline-seeks-patent-for-audio-aircraft-detection-system-that-drones-might-use/* ("Zipline seeks patent for audio aircraft detection system that drones might use") (Exhibit M).

an array of acoustic probes;



Array of acoustic probes

Zipline's DAA collision system comprises an array of acoustic probes as shown in the above picture.

- See also https://www.flyzipline.com/press/
  zipline-unveils-first-onboard-acoustic-detectionand-avoidance-system-for ("Zipline's new DAA
  system relies on a series of small, lightweight
  acoustic microphones and onboard processors to
  navigate airspace and provide 360-degree
  awareness with a range up to 2,000 meters. Using
  this onboard system, aircraft can autonomously
  monitor for other aircraft in real-time, and adapt to
  changes in their flight path.") (emphasis added)
  (Exhibit J).
- U.S. Pat. Appl. Publ. No. 2022/0011786, Assignee
   Zipline International Inc., Inventors Teisberg et
   al., at [0017] ("a detection and avoidance (DAA)
   system uses an array of audio sensors to determine

processor filters out noise and its

own acoustic signals; extracts the

approaching target; calculates the

bearing angle rate of change of the

approaching target, and determines

intensity, the bearing and the

whether the aircraft and the

approaching target are on a

potential collision course.

acoustic signals emanating from the

relative to an aircraft") (Exhibit G).

Zipline's DAA collision system comprises a digital signal processor configured to receive acoustic data processor configured to receive acoustic data from the array of acoustic probes, wherein said digital signal

https://www.flyzipline.com/press/zipline-unveils-

• https://www.flyzipline.com/press/zipline-unveils-first-onboard-acoustic-detection-and-avoidance-system-for ("Zipline's new DAA system relies on a series of small, lightweight acoustic microphones and onboard processors to navigate airspace and provide 360-degree awareness with a range up to 2,000 meters. Using this onboard system, aircraft can autonomously monitor for other aircraft in real-time, and adapt to changes in their flight path.") (emphasis added) (Exhibit J).

location of intruding aircraft in multiple directions

• U.S. Pat. Appl. Pub. No. 2021/0225182, Assignee Zipline International Inc., Inventors Wyrobek et al. at [0004] ("One or more non-transitory computer readable media may be encoded with instructions which, when executed by one or more processors of an acoustic aircraft detection system, cause the aircraft detection system to analyze an audio signal received by the acoustic aircraft detection system to determine directional information for a source of the audio signal and generate an estimation for a location of the source of the audio signal based on directional information. (Exhibit F)

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Zipline's digital signal processor filters out noise and its own acoustic signals and extracts the acoustic signals emanating from the approaching target.

- U.S. Pat. Appl. Pub. No. 2021/0225182, Assignee Zipline International Inc., Inventors Wyrobek et al. at [0019] ("The audio based system can distinguish between noise produced by intruders, such as other aircraft, and noise produced by the aircraft's own engines (or flight system), distinguish between noise produced by intruders and natural sources (e.g., wind or weather noise) and determine directionality of sound (e.g., provide a location estimation of the intruder relative to the aircraft.)" (Exhibit F).
- detection and avoidance (DAA) system uses an array of audio sensors to sense location of intruder in multiple directions relative to an aircraft, e.g., 360 degrees. Audio signals generated by intruders may be differentiated from, for example wind noise or noise from the aircraft, by comparing received audio signals to known other aircraft signals and rejecting signals assumed to not be associated with other aircraft, such as broadband signals (e.g., wind), non-directional signals, and near-field signals (e.g., noises from the aircraft's own engine) (Exhibit F).

Zipline's digital signal processor calculates the intensity, the bearing and the bearing angle rate of change of the approaching target, and determines whether the aircraft and the approaching target are on a potential collision course.

- U.S. Pat. Appl. Pub. No. 2021/0225182, Assignee Zipline International Inc., Inventors Wyrobek et al. at [0048] [0049] ("The intruder elevation may be represented by several bins of angles with probabilities that the intruder elevation is included in each bin. The intruder elevation may also be represented by an estimated angle and a confidence interval corresponding to the estimated angle.... As data is continually collected and processed by the DAA system, multiple state estimations may be aggregated to track and [sic] intruder aircraft 102 with respect to the aircraft 100." (Exhibit F)
- See also id. at [0071] ("FIG. 7 is a flow diagram of example steps for commanding a maneuver or chage in flight plan of path based on a multichannel audio signal received by an DAA system, such as one to increase a distance between the aircraft 100 and the intruder 102, e.g., avoidance maneuver. A receiving operation 402 receives a multichannel audio signal at an aircraft acoustic array. The receiving operation 402 may, in some implementations, include some processing

of the multichannel audio signal. For example, the receiving operation 402 may time stamp signals, time align the multichannel audio signal across the channels, convert an analog signal to a digital signal, domain transform the signal, or otherwise process or manipulate the received multichannel audio signal. (Exhibit F)

- U.S. Pat. Appl. Publ. No. 2022/0011786, Assignee Zipline International Inc., Inventors Teisberg et al., at [0021] ("A DAA system may be used to track, e.g., follow the movement, an intruder 102 (or multiple intruders) while the intruder 102 is within the detection zone 101. The DAA system may also direct the aircraft 100 to perform maneuvers or update its flight path to keep the avoidance zone 103 clear of intruders.") (Exhibit G)
- See id. at [0022] [0023] ("Where the signal is likely from an intruder, the DAA system may estimate the azimuth 0 of the intruder 102 by analyzing variations in the audio signal across sensors and the distance between sensors....

  Specific maneuvers may be used to gather additional data, e.g., force changes in the signal characteristics by changing positioning of the aircraft 100 relative to the intruder 102.")

  (Exhibit G)

#### **FIRST CAUSE OF ACTION**

#### Infringement of U.S. Patent No. 7,606,115

- 90. SARA hereby restates and incorporates ¶¶ 1-89 of this Complaint.
- 91. On October 20, 2009, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 7,606,115, entitled "Acoustic Airspace Collision Detection System". SARA is the owner of the '115 patent. On January 23, 2024, the United States Patent and Trademark Office issued a Certificate of Correction to the '115 patent, in which a claim of priority to Provision Application No. 60/852,320, filed October 17, 2006, was added.
  - 92. The '115 patent is valid and enforceable under the patent laws of the United States.
- 93. Defendants infringe and have infringed literally or under the doctrine of equivalents, at least claim 1 of the '115 patent by making, using, selling, and/or offering to sell UAV's incorporating acoustic DAA technology covered by the claims of the patent in the United States, and/or importing into the United States, without authority or license, products that incorporate infringing acoustic DAA technology.
- 94. In view of the January 23, 2024 Certificate of Correction issued by the United States Patent Office, and pursuant to 35 U.S.C. § 255, SARA alleges infringement only on and after January 23, 2024, and consequently does not seek recovery of damages related to this First Cause of Action for activities occurring prior to January 23, 2024. SARA expressly does not waive any of its rights related to any claim or cause of action accruing on or after January 23, 2024.
- 95. Defendant Zipline was notified at least as early as June 15, 2017 of the existence of the '115 patent. Accordingly, at least Zipline's infringement has been and continues to be willful.
- 96. SARA has been, and continues to be, damaged and irreparably harmed by Zipline's infringement of the '115 patent.

#### SECOND CAUSE OF ACTION

Misappropriation of Trade Secrets Under the Defend Trade Secrets Act (18 U.S.C. § 1836)

97. SARA hereby restates and incorporates ¶¶ 1-96 of this Complaint.

results and data derived from SARA's proprietary acoustic collision avoidance simulator;

- 98. Between April 5, 2017 and December 31, 2017, including at least during meetings between SARA and Zipline on April 11, 2017 and May 5, 2017, and in telephonic and e-email correspondence, SARA disclosed to Zipline various confidential, proprietary, and trade secret information.
- 99. The DTSA defines "trade secret" as: "all forms and types of financial, business, scientific, technical, economic, or engineering information, including patterns, plans, compilations, program devices, formulas, designs, prototypes, methods, techniques, processes, procedures, programs, or codes ... if (A) the owner thereof has taken reasonable measures to keep such information secret; and (B) the information derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable through proper means by, another person who can obtain economic value from the disclosure or use of the information. 18 U.S.C. 1893(3)
- 100. The SARA information disclosed to Zipline included trade secrets as defined under the DTSA, including at least the following scientific, technical, and engineering information related to SARA's proprietary acoustic DAA technology:
  - information regarding the implementation and use of acoustic microphone probes on a fixed wing airframe;
  - information regarding the placement of acoustic microphone probes on a fixed wing airframe;
  - technical information regarding acoustic microphone probes, including the use of "breakaway" probes;
  - technical information regarding noise reduction technology used in acoustic microphone probes, including windscreening and other flow noise reduction technology;
  - technology and know-how related to propeller noise cancellation related to acoustic probe placement;
  - information and work product related to aircraft signature identification and aeroacoustic beamforming;

acoustic DAA software and hardware schematics and specifications;

the circumstances to maintain the secrecy of the trade secret technology identified above.

- 102. The trade secret information identified above derives independent economic value
- from not being generally known to, or ascertainable through proper means by others. In particular, SARA, through the expertise of its engineers and employees, has devised, developed, and implemented a method of achieving collision avoidance in UAV's that has not previously been utilized given the technological challenges involved with developing a functional, successful Acoustic DAA system. SARA's expertise has put it in a unique position in the UAV industry of

being able to provide its technology to UAV manufacturers, in turn enabling UAV's that can

operate safely at desirable altitudes, and within the guidance and regulations set forth by the FAA.

and other general know-how related to integration and use of acoustic sensors on UAV's.

Since the time of its development, SARA has taken all reasonable measures under

- 103. At the time of the disclosure of the SARA trade secret information identified above, Zipline knew or had reason to know that its knowledge of the trade secrets was acquired under circumstances giving rise to a duty to maintain its secrecy. Specifically, the SARA trade secret information was disclosed to Zipline pursuant to the April 5, 2017 Confidential Non-Disclosure Agreement between the parties, under which Zipline agreed to keep confidential SARA's proprietary information.
- 104. The trade secret information disclosed by SARA to Zipline was identified as proprietary at the time of its disclosure to Zipline. For example, a presentation given to Zipline by SARA on March 5, 2017 includes a "SARA Proprietary" marking. Additionally, the above categories of information were specifically identified as SARA trade secrets in correspondence from SARA to Zipline on June 15, 2017.
- 105. In breach of its confidentiality obligation under the Confidential Non-Disclosure Agreement, and its duty to maintain the secrecy of SARA's trade secrets, Zipline has, since at least April 2020 used SARA's confidential, proprietary, and trade secret information without SARA's consent for development of Zipline's own products, for purposes of generating investment

fundraising, and for purposes of entering into lucrative contracts with third parties including Walmart, Inc.

- 106. In breach of its confidentiality obligation, Zipline has disclosed SARA's confidential, proprietary, and trade secret information without SARA's consent by filing patent applications including such information and causing the same to be published by the United States Patent and Trademark Office.
- 107. As a result of Zipline's ongoing unauthorized use and disclosure of SARA's confidential, proprietary, and trade secret information, Zipline has been unjustly enriched. Moreover, Ziplines publication and use of SARA's proprietary Acoustic DAA technology has significantly diminished the value of SARA's technology, and has negatively impacted SARA's ability to enter into partnerships with other customers, or otherwise exploit its proprietary technology.
- 108. As a result of Zipline's ongoing unauthorized use and disclosure of SARA's confidential, proprietary, and trade secret information, SARA has thus been, and continues to be damaged and irreparably harmed. Because the full extent of this harm may be unascertainable and because monetary damages may thus be inadequate to fully compensate SARA for this harm, SARA submits that permanent injunctive relief would, in this case, be appropriate and warranted and would not be contrary to the public interest.

#### THIRD CAUSE OF ACTION

# Misappropriation of Trade Secrets Under the California Uniform Trade Secrets Act (Cal. Civ. Code. § 3426)

- 109. SARA hereby restates and incorporates ¶¶ 1-108 of this Complaint.
- 110. Between April 5, 2017 and December 31, 2017, including at least during meetings between SARA and Zipline on April 11, 2017 and May 5, 2017, and in telephonic and e-email correspondence, SARA disclosed to Zipline various confidential, proprietary, and trade secret information.

- 111. The California UTSA defines a trade secret as "information, including a formula, pattern, compilation, program, device, method, technique, or process that: (1) Derives independent economic value, actual or potential, from not being generally known to the public or to other persons who can obtain economic value from its disclosure or use; and (2) Is the subject of efforts that are reasonable under the circumstances to maintain its secrecy." Cal. Civ. Code. 3426.1(d).
- 112. The SARA information disclosed to Zipline included trade secrets as defined under the California UTSA, including at least the following information related to SARA's proprietary acoustic DAA technology:
  - information regarding the implementation and use of acoustic microphone probes on a fixed wing airframe;
  - information regarding the placement of acoustic microphone probes on a fixed wing airframe;
  - technical information regarding acoustic microphone probes, including the use of "break-away" probes;
  - technical information regarding noise reduction technology used in acoustic microphone
     probes, including windscreening and other flow noise reduction technology;
  - technology and know-how related to propeller noise cancellation related to acoustic probe placement;
  - information and work product related to aircraft signature identification and aeroacoustic beamforming;
  - results and data derived from SARA's proprietary acoustic collision avoidance simulator;
  - acoustic DAA software and hardware schematics and specifications;
  - and other general know-how related to integration and use of acoustic sensors on UAV's.
- 113. Since the time of its development, SARA has taken all reasonable efforts to maintain the secrecy of the trade secret technology identified above.
- 114. The trade secret information identified above derives independent economic value from not being generally known to, or ascertainable through proper means by others. In particular, SARA, through the expertise of its engineers and employees, has devised, developed, and

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- implemented a method of achieving collision avoidance in UAV's that has not previously been utilized given the technological challenges involved with developing a functional, successful Acoustic DAA system. SARA's expertise has put it in a unique position in the UAV industry of being able to provide its technology to UAV manufacturers, in turn enabling UAV's that can operate safely at desirable altitudes, and within the guidance and regulations set forth by the FAA.
- 115. At the time of the disclosure of the SARA trade secret information identified above, Zipline knew or had reason to know that its knowledge of the trade secrets was acquired under circumstances giving rise to a duty to maintain its secrecy. Specifically, The SARA trade secret information was disclosed to Zipline pursuant to the April 5, 2017 Confidential Non-Disclosure Agreement between the parties, under which Zipline agreed to keep confidential SARA's proprietary information.
- The trade secret information disclosed by SARA to Zipline was identified as 116. proprietary at the time of its disclosure to Zipline. For example, a presentation given to Zipline by SARA on March 5, 2017 includes a "SARA Proprietary" marking. Additionally, the above categories of information were specifically identified as SARA trade secrets in correspondence from SARA to Zipline on June 15, 2017.
- In breach of its confidentiality obligation under the Confidential Non-Disclosure 117. Agreement and its duty to maintain the secrecy of SARA's trade secrets, Zipline has, since at least April 2020, used SARA's confidential, proprietary, and trade secret information without SARA's consent for development of Zipline's own products, for purposes of generating investment fundraising, and for purposes of entering into lucrative contracts with third parties including Walmart, Inc.
- In breach of its confidentiality obligation, Zipline has disclosed SARA's 118. confidential, proprietary, and trade secret information without SARA's consent by filing patent applications including such information and causing the same to be published by the United States Patent and Trademark Office.
- 119. As a result of Zipline's ongoing unauthorized use and disclosure of SARA's confidential, proprietary, and trade secret information, Zipline has been unjustly enriched.

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Moreover, Ziplines publication and use of SARA's proprietary Acoustic DAA technology has significantly diminished the value of SARA's technology, and has negatively impacted SARA's ability to enter into partnerships with other customers, or otherwise exploit its proprietary technology.

120. As a result of Zipline's ongoing unauthorized use and disclosure of SARA's confidential, proprietary, and trade secret information, SARA has thus been, and continues to be damaged and irreparably harmed. Because the full extent of this harm may be unascertainable and because monetary damages may be inadequate to fully compensate SARA for this harm, SARA submits that permanent injunctive relief would, in this case, be appropriate and warranted and would not be contrary to the public interest.

#### FOURTH CAUSE OF ACTION

#### Breach of Contract by Defendant Zipline International, Inc.

- 121. SARA hereby restates and incorporates ¶¶ 1-120 of this Complaint.
- 122. On April 5, 2017, SARA and Zipline entered into a Confidential Non-Disclosure Agreement related to the parties' business discussions related to UAV technology.
- 123. The Confidential Non-Disclosure Agreement between SARA and Zipline stated that "SARA will be sharing information about SARA's acoustic Sense and Avoid Technology for Unmanned Air Systems (UAS) and technology implementation plans".
- 124. The Confidential Non-Disclosure Agreement between SARA and Zipline further states that "Proprietary Information ... shall be used solely for the purpose of discussion with one another future collaboration, and if so agreed, developing plans for said collaboration. No other use of Proprietary Information is granted without the prior written consent of the disclosing party."
- 125. SARA has complied and continues to comply with its obligations under the Confidential Non-Disclosure Agreement.
- 126. Pursuant to this agreement, SARA did share confidential, proprietary, and trade secret information with Zipline, including at least during meetings between the parties on April 11, 2017 and May 5, 2017.

- 127. Thereafter, in violation of the Confidential Non-Disclosure Agreement between the parties, Zipline used SARA's confidential, proprietary, and trade secret information for development of Zipline's own products, for purposes of generating investment fundraising, and for purposes of entering into lucrative contracts with third parties including Walmart, Inc.
- 128. Additionally, in violation of the Confidential Non-Disclosure Agreement between the parties, Zipline filed patent applications that included SARA's confidential, proprietary, and trade secret information, and caused the applications to be published by the United States Patent and Trademark Office.
- 129. SARA did not provide written or other consent to Zipline for its unauthorized use of SARA's confidential, proprietary, and trade secret information.
- 130. Zipline's use of SARA's confidential, proprietary, and trade secret information for purposes outside those explicitly set forth in the Confidential Non-Disclosure Agreement between the parties, and without SARA's prior written consent, constitutes a continuing breach of the Confidential Non-Disclosure Agreement.
- 131. SARA has been, and continues to be, damaged and irreparably harmed by Zipline's breach of the Confidential Non-Disclosure Agreement.

#### FIFTH CAUSE OF ACTION

Unfair Competition (Cal. Civ. Code. § 17200 et seq.) by Defendant Zipline International, Inc.

- 132. SARA hereby restates and incorporates ¶¶ 1-131 of this Complaint.
- 133. Zipline has committed unlawful acts in the marketplace for UAV's, and specifically in the marketplace for UAV DAA systems.
- 134. By using acoustic DAA technology on its UAV products, Zipline has infringed, and continues to infringe SARA's '115 patent.
- 135. Zipline has misappropriated SARA's trade secrets by using SARA's confidential, proprietary, and trade secret information relating to acoustic DAA systems in developing and manufacturing its own products without SARA's consent.

- 136. Zipline has misappropriated SARA's trade secrets by filing patent applications containing SARA's confidential, proprietary, and trade secret information relating to acoustic DAA systems, and causing the same to be published by the United States Patent and Trademark Office.
- 137. On information and belief, in developing its products, soliciting funding and investments, and negotiating and securing business relationships with customers and partners, Zipline has misrepresented the origins of the acoustic DAA systems used in its UAV's, and claimed to be the inventor and developer of acoustic DAA technology.
- 138. On information and belief, Zipline has obtained nearly \$450 million in investor funding, and has secured lucrative business contracts with customers including Walmart, Inc. in reliance on Zipline's use of SARA's confidential, proprietary, and trade secret acoustic DAA technology and on Zipline's misrepresentations about the origins of such technology.
- 139. On information any belief, without having misappropriated SARA's confidential, proprietary, and trade secret acoustic DAA technology and misrepresented the origins of such technology, Zipline would not have been able to secure such investor funding or enter into such lucrative business contracts.
- 140. Zipline's misappropriation and misrepresentation has unfairly deprived SARA of the opportunity to obtain its own investor funding, enter into its own lucrative business contracts, and compete fairly in the market for UAV DAA technology.
- 141. Zipline's misappropriation and misrepresentation thus constitute unfair competition in violation of Cal. Civ. Code § 17200 et seq.
- 142. SARA has been, and continues to be damaged and irreparably harmed by SARA's unlawful and unfair business practices.

#### PRAYER FOR RELIEF

WHEREFORE, Plaintiff respectfully requests that this Court enter judgment in its favor and grant the following relief:

143. A finding that Defendants have infringed and continue to infringe, literally or under the doctrine of equivalents, the '115 patent in violation of 35 U.S.C. § 271 *et seq.*;

- 144. A finding that Defendants' infringement of the '115 patent was willful;
- 145. A finding that Defendant Zipline misappropriated Plaintiff's trade secrets in violation of Cal. Civ. Code. § 3426;
- 146. A finding that Defendant Zipline misappropriated Plaintiff's trade secrets in violation of 18 U.S.C. § 1836;
- 147. A finding that Defendant Zipline breached the Confidential Non-Disclosure Agreement between the Zipline and Plaintiff;
- 148. A finding that Defendant Zipline International has unfairly competed with Plaintiff in violation of Cal. Civ. Code. § 17200 et seq.;
- 149. A finding that each of Zipline's U.S. Provisional Patent Application Nos. 62/984,266, 62/955,946, 63/021,633, 63/082,832, 63/082,821, 63/082,869, and 63/082,838 and Nonprovisional U.S. Patent Application Nos. 17/138,063, 17/138,285, 17/138,526, and 17/485,050 constitutes Plaintiff's misappropriated property, that Zipline be held to be a constructive trustee of the property misappropriated, and requiring Zipline to assign or otherwise convey all rights and interest it has in such patent applications, and any patents which may issue therefrom, as well as any corresponding pending or issued patent rights in foreign countries, to Plaintiff.
  - 150. An award to Plaintiff of damages in an amount to be proven at trial;
- 151. An award to Plaintiff of treble damages for willful infringement pursuant to 35 U.S.C. § 284;
- 152. An award to Plaintiff of exemplary damages for willful and malicious misappropriation of trade secrets under Cal. Civ. Code. § 3426.3;
- 153. Injunctive relief prohibiting Defendants from further acts of infringement of the '115 patent;
- 154. Injunctive relief based on Defendant's misappropriation of SARA's trade secrets and prohibiting Defendant from obtaining further unjust enrichment derived from its misappropriation of SARA's trade secret information;
- 155. A finding that this case is exceptional and an award to Plaintiff of its attorneys' fees pursuant to 35 U.S.C. § 285;

156. Such other and further relief as this Court deems just and appropriate. 1 2 **JURY DEMAND** 3 Plaintiff hereby requests a trial by jury in this matter. 4 5 Dated: February 9, 2024 Respectfully submitted, 6 MAYNARD NEXSEN LLP 7 8 By <u>/s/ Brandon H. Stroy</u> Brandon H. Stroy (SBN 289090) 9 bstroy@maynardnexsen.com MAYNARD NEXSEN LLP 10 Two Embarcadero Center, Suite 1450 San Francisco, CA 94111 11 Telephone: 415.646.4703 12 Facsimile: 205.714.6415 13 Ashe Puri (SBN 297814) 14 apuri@maynardnexsen.com Jacqueline Relatores (SBN 341583) 15 jrelatores@maynardnexsen.com MAYNARD NEXSEN LLP 16 10100 Santa Monica Boulevard, Suite 550 Los Angeles, CA 90067 17 18 Telephone: 310.596.4344 Facsimile: 205.714.6415 19 Attorneys for Plaintiff SARA, Inc. 20 21 22 23 24 25 26 27 28

#### CERTIFICATE OF SERVICE

The undersigned hereby certifies that on February 9, 2024, a copy of the foregoing document was duly served on all counsel of record via ECF. I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Executed this 9th day of February, 2024 at San Francisco, California.

6 /s/ Brandon H. Stroy
Brandon H. Stroy